

**In the Claims:**

1. (Cancelled)

2. (Currently Amended) A ~~[[The]]~~ method for detecting toxic materials in water using an electrochemically active bacteria comprising the steps of:

- a. screening out the suspension and unwanted materials in a sample water;
- b. introducing activated sludge into an anode compartment of a microbial fuel cell so that electrochemically active bacteria in the sludge are attached to an electrode in the anode compartment and enrichment culture, simultaneously or subsequently, and incorporating water saturated with air into a cathode compartment of the microbial fuel cell to keep a certain potential difference so as to make an efficient biological electrochemical reaction;
- c. determining the electrochemical signals generated from the microbial fuel cell;
- ~~[[b.]]~~ d. introducing [[a]] the sample water to the anode compartment of the [[above]] microbial fuel cell; and
- e. ~~[[c]]~~ determining the degree of electrochemical signal changes from the microbial fuel cell after introducing the sample water to the microbial fuel cell.

3. (Cancelled)

4. (Currently Amended) A ~~[[The]]~~ device for detecting toxic materials in water comprising:

- a. a sample water inlet pump ~~[[1]]~~;
- b. a first pretreatment tank ~~[[2]]~~ treating the sample water; ~~[[and]]~~
- c. a microbial fuel cell ~~[[6]]~~ for detecting ~~[[which senses]]~~ the changes in the current due to the entry of any toxic materials,  
wherein the microbial fuel cell comprises an anode compartment and a cathode compartment, and the anode compartment acts as a catalyst by attaching an electrochemically active bacteria at the time of entering activated sludge including the electrochemically active bacteria into the microbial fuel cell; [[and]]

- d. a Personal Computer(PC) and controlling part [[ (11) ]] for controlling ~~which control~~ the value of the signals and automatically ~~determine~~ determining the toxicity;
- e. a solenoid valve which changes the flow of the sample water when detecting the entry of the toxic materials; and
- f. a sample-gathering vessel which intakes and stores the sample water when the entry of the toxic materials are sensed.

5. (Cancelled)